

TYPHOON NELL (37W)

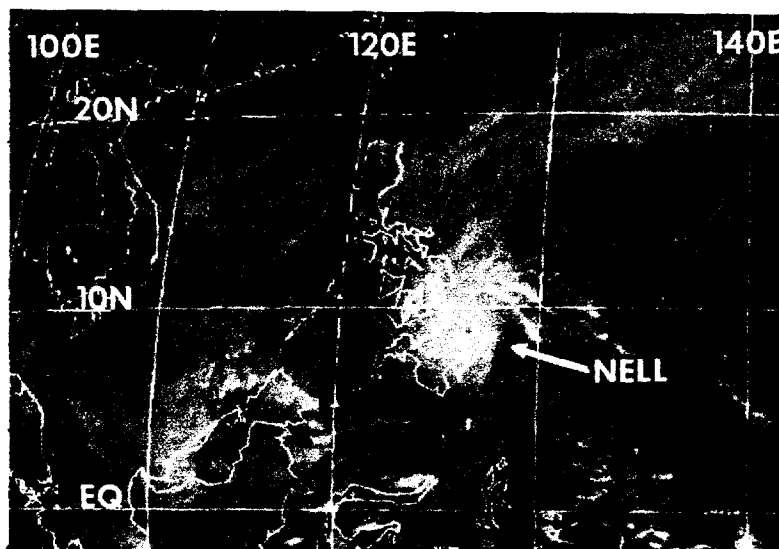


Figure 3-37-1 Typhoon Nell at peak intensity near Mindanao close to the time of landfall (260132Z December visual GMS imagery).

I. HIGHLIGHTS

The final tropical cyclone of the 1993 season, Typhoon Nell, developed south of Pohnpei in an active near equatorial trough. Embedded in a high vertical shear environment, Nell developed slowly while tracking westward through the Caroline Islands. Intensifying to typhoon strength before crossing the Philippines (Figure 3-37-1), Nell maintained typhoon intensity while crossing the islands. Once in the South China Sea, Nell entered a high vertical shear environment and quickly dissipated.

II. CHRONOLOGY OF EVENTS

December

- 190600Z - An area of persistent convection within the monsoon trough resulted in the first mention of the disturbance in the Significant Tropical Weather Advisory.
- 201300Z - A Tropical Cyclone Formation Alert (TCFA) was issued based on the development of deep convection near the circulation center and an overall improvement in organization.
- 211300Z - Although the disturbance did not intensify during the first TCFA, conditions remained favorable for development and a second TCFA was issued.
- 221300Z - The TCFA was canceled as the convection decreased steadily.
- 231200Z - The first warning was issued without a TCFA in effect, based on improved convective organization and a satellite intensity estimate of 25 kt (13 m/sec).
- 250000Z - A satellite intensity estimate of 35 kt (18 m/sec), led to the upgrade of Nell to a tropical storm. Post analysis indicates that Nell likely became a tropical storm over a day earlier, at 231800Z.
- 260000Z - Based on the first daylight satellite intensity estimate of 65 kt (33 m/sec), Nell was upgraded to a typhoon. Post analysis indicates that Nell actually achieved typhoon intensity about 12 hours earlier.
- 280600Z - The final warning was issued on Nell as it dissipated in the South China Sea in a high shear environment.

III. IMPACT

News agencies attributed seven deaths to Nell, six at Surigao City, Mindanao, near the area of landfall. Additionally, thousands of residents in low-lying river valleys in northern Mindanao were forced to evacuate to higher ground.